



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,461	05/18/2001	Shinichi Yoshinari	Q64426	3963

75901

05/09/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W. Suite 800
Washington, DC 20037-3213

EXAMINER

HESS, BRUCE H

ART UNIT	PAPER NUMBER
----------	--------------

1774

DATE MAILED: 05/09/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/859,461

Applicant(s)

Yoshinari et al.

Examiner

Bruce Hess

Group Art Unit

1774

A910

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 3-21-03
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1, 2, 4, 6 and 17-27 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1, 2, 4, 6 and 17-27 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

Art Unit: 1774

1 4 18 19 21 23 26-28

Claims 1-4 and 17-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh in view of applicants' statement of the prior art.

1 19 26-28

Claims 1, 17-20, 22, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al in view of applicants' statement of the prior art..

Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh in view of applicants' statement of the prior art and Yamaguchi et al.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al in view of applicants' statement of the prior art and Yamaguchi et al.

P. 1 { Hsieh and Suzuki et al teach thermal transfer sheets comprising a support and an image formation layer that includes permanent yellow as an organic pigment.

Additional pigments can be present which would function as matting agents. An optional backing can be present on both thermal transfer sheets. Hsieh additionally teaches that the image formation layer can contain polyvinyl butyral (i.e., applicants' preferred amorphous organic polymeric binder).

Applicants acknowledge in their specification that the use of light-to-heat conversion layers in thermal transfer sheets is conventional in the art. Consequently, use of a prior art light-to-heat conversion layer for its concomitant function in the thermal transfer sheets of Hsieh or Suzuki et al would have been obvious to one of ordinary skill in this art in the absence of unexpected results. Applicants further acknowledge that image-receiving sheets conventionally comprise a porous support, a cushion layer and an image-receiving layer. Use of such a conventional prior art image receiving sheet

Art Unit: 1774

with the thermal transfer sheets of the primary references would have also been an obvious expedient to one of ordinary skill in this art in the absence of unexpected results.

Finally, the experimental modification of this prior art in order to ascertain optimum-operating conditions (e.g., determine layer thicknesses and compositional proportions) fails to render applicants' claims patentable in the absence of unexpected results. In re Aller, 105 USPQ 1226. With respect to determining the heat resistance of the image formation layer, it is noted that Yamaguchi et al recognize that this parameter is result-effective.

The relevant portions of Hsieh are found at column 5, lines 44, 45, 48 and 56 et seq. and column 6, lines 3-7, 40 and 41 while the relevant portions of Suzuki et al are found at column 3, lines 9-13 and column 23, line 36.

Any inquiry concerning this communication should be directed to Bruce Hess at telephone number (703) 308-2402.

B. Hess/dh
April 30, 2003

A handwritten signature in black ink, appearing to read "Bruce Hess", with a stylized flourish at the end.

BRUCE H. HESS
PRIMARY EXAMINER